

# Syntech Flexipur Mono

Liquid, single-component, waterproofing polyurethane membrane



Single-component coating based on polyurethane resins, for the coating, waterproofing and elastic protection of roofs, terraces, stairs, bridges and surfaces that are cracked or subject to micro-cracks and crazing. Can also be used as a waterproofing under tiles.

**CUSTOMS CODE:**

**COMPONENTS:** Single-component

**APPEARANCE:** Liquid

**AVAILABLE COLORS:** Gray

**PACKAGING AND DIMENSIONS:** Can 25 kg

## OBTAINED CERTIFICATIONS AND REGULATIONS



## FEATURES AND BENEFITS

- High resistance to abrasion and atmospheric agents
- Applicable on tarred surfaces and bituminous sheaths
- Walkable product suitable for covering and waterproofing flat roofs
- Ease and speed of application with quick intervention times
- It does not require fractionation joints
- Elastic product resistant to dynamic stress with high crack bridging capacity
- Vapor permeable product

## FIELDS OF APPLICATION

- Waterproof coating of concrete, ceramic, porcelain stoneware, tarred substrates and bituminous sheaths, suitably prepared
- Creation of elastic and waterproof protections for roofs and large surfaces even with complex geometries
- Ideal for waterproofing cycles of balconies, roofs and terraces as it does not require preliminary demolition work or replacement of coverings
- It allows you to create a continuous, elastic and waterproof layer that is resistant even to low temperatures
- Waterproof membrane for new structures or for the restoration of existing ones
- Waterproofing under tiles glued on terraces and balconies

## ALLOWED SUPPORTS

Concrete - Tiles - Bitumen waterproofing membranes - Floor screed - Steel - Bricks - Porous stone

## PREPARATION OF SUPPORTS

### Concrete

The surfaces to be coated must be stable, clean and free of substances that can affect the adhesion of the coating. In case of restoration, first use mortars and products from the FLOOR line or the REPAR line suitable for the purpose. Wait for the drying times before applying the next coating. The tensile strength of the support must not be less than 1.5 N/mm<sup>2</sup>. The concrete surfaces must be previously prepared by dry sanding with diamond tools, shot peening with closed cycle machines or closed cycle milling, depending on the degree of contamination of the support and the thickness of the final coating. Any existing paintwork, coatings or paints, residues of cement laitance, release agents, greases, silicones, etc. they can be removed mechanically by sanding with a single-brush sander, sandblasting, hydro-sandblasting or chemical removal, treating the support with Deterg A (diluted in water 1:10) left to act until the reaction is complete, then rinsing thoroughly with water.

### Cracks and fissures

In the case of static cracks, for sealing use mortars from the FLOOR line, or epoxy products such as Syntech Primer EP-W or Syntech AS 21. The sealing of dynamic cracks or cracks larger than > 4-5 mm must be evaluated on site. They can generally be grouted using elastomeric materials or worked as movement joints.

### Localized grouting and restoration

Any holes, deficiencies, repairs of portions of concrete can be carried out by applying our mortars from the FLOOR line or the REPAR line. Any small filling of holes and gaps can be carried out by applying Syntech AS 21 epoxy mortar.

### Tarred surfaces or with bituminous sheaths

The surfaces to be coated must be oxidized, stable, clean and free of substances that can affect the adhesion of the coating. Eliminate any bubbles and deformations present in the existing bituminous sheaths and all weak and inconsistent parts. Eliminate any residue or puddles of water resulting from previous processing, washing or meteorological events and dry the support.

### Ceramics, tiles, stoneware

The surfaces to be coated must be stable, clean and free of substances that can affect the adhesion of the coating such as dirt, grease, oil, etc. Prepare the support by mechanical sanding with diamond discs and dust extraction or shot peening.

## MODE OF USE

Before installing resin waterproofing systems and coatings, always check the residual humidity content. Check for the presence of residual humidity using the plastic sheet method according to the ASTM D 4263 standard: fix a heavy polyethylene sheet with a size of at least 45x45 cm to the support with adhesive tape. 24 hours after its installation, lift the sheet and check for signs of humidity. If testing with a carbide hygrometer, the moisture content of the substrate must be < 4% by weight.

### Application temperature: minimum +5°C \_ maximum +35°C

Relative humidity of the environment: maximum 80%

The support must have a temperature at least +3°C higher than the dew point to reduce the risk of condensation or bleaching of the finish.

### Application:

Thoroughly homogenize the product by manually shaking the container before use or mechanically, taking care to use a clean tool free of potentially polluting substances. The product can be applied by brush, roller or airless spray. If necessary, for spray applications, it is possible to dilute the product with Syntech Polyurethane Thinner at a rate of 5-8% max by weight.

Apply two or more coats of Syntech Flexipur Mono, taking care to respect the indicated consumption and thickness. Wait at least 8 hours, then apply the next coat of product. In order to guarantee an adequate thickness of the waterproofing system, it is recommended to insert the Arma TNT non-woven fabric during the application phase, taking care to cover it completely with the waterproofing so as to increase the resistance to the stresses and cracks to which the waterproofing system is subjected. Apply the Syntech Flexipur Mono waterproofing product to the area to be treated, then lay Arma TNT, compressing it with a metal bubble-breaking roller, a trowel or a smooth spatula, checking that the non-woven fabric is completely embedded in the membrane and ensuring perfect wetting. Wait for the first layer of applied product to dry completely, then proceed with the application of the second uniform coat to completely cover the non-woven fabric. The overlaps of the fabric at the connection points in the longitudinal and transversal direction must be carried out by making an overlap between the sheets of no less than 5 cm. In case of rain between the application of the first and second coat, let the non-woven fabric dry completely before applying the second layer. ELASTOTEX elastic straps can be used advantageously in the overlaps between the wall and the floor or in critical points.

### Protective painting

If you want to further increase resistance to UV rays, we recommend applying a coat of white or colored Syntech Flexipur elastic polyurethane finish to the waterproofing product.

### Waterproofing under tiles

On the adequately prepared support, apply a coat of Syntech Primer EP-S with a brush or medium-haired roller as a bonding primer, taking care to saturate the entire surface to be treated. On the still fresh primer, at the end of the application, proceed with a sowing of Quartz 0.1-0.5 until the surface is saturated. Wait for the primer to harden then remove the sand by vacuuming the excess parts. Then apply two coats of Syntech Flexipur Mono waterproofing. Once hardened, the covering is suitable for gluing tiles using a two-component cementitious matrix adhesive, Osmokoll, CE certified according to class C2TES1.

## APPLICATION METHODS



Brush - Paint roller - Sprayer



## TOOL CLEANING

Syntech Diluente Poliuretano

## KEY FEATURES

- |  |   |
|--|---|
|  Density: 1.59 ± 0.05 kg/l       |  Shelf-life: 12 months         |
|  Temperature of use: +5 / +35 °C |  To be applied in two coats    |
|  Use wearing protective glasses  |  Use wearing protective gloves |

## TECHNICAL SPECIFICATIONS

*EN 1542*  
Adhesion by direct traction  $\geq 4.0 \text{ N/mm}^2$

*EN ISO 6272-1*  
Impact resistance **Class I** > 4 N/m

*Brookfield ASTM D 2196*  
Viscosity **7500 ± 1500 mPas**

*EN 1062-3*  
Capillary absorption **w** < 0.1

*EN 1062-7*  
Dynamic crack bridging > **B4.1**

*EN 12311-2*  
Longitudinal elongation at break > **400 %**

*EN ISO 7783-1*  
Permeability to water vapor **Classe I Sd** < 5 m

*EN 1062-6*  
Permeability to CO<sub>2</sub> **Sd** > 50 m

Heat resistance **70 °C**

Touch hardening at 20°C **8-9 h**

*Shore A EN ISO 868*  
Hardness > **60**

< **500 g/l**

*EN 1062-7*  
**A5**

Working temperature **-40 / +80 °C**

*EN 14891*  
> **0.5 N/mm<sup>2</sup>**

*EN 14891*  
Durability - Tensile adhesion after immersion in water > **0.5 N/mm<sup>2</sup>**

Complete hardening at 20°C **10 day**

Time before second coat at 20°C **12 h**

*EN 13529*  
Resistance to severe chemical attacks **See Table**

## CONSUMPTION

Approximately 1 kg/m<sup>2</sup> of Syntech Flexipur Mono for each coat (apply two coats).

## STORAGE AND CONSERVATION

Protect from freezing. Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Protect from humidity. Store the product at a temperature between +5°C and +35°C.



## ADDITIONAL CONTENT

### Workability time

60' at 20°C

### Commissioning

Walkability

T.+15 °C ~ 72 h

T.+20 °C ~ 48 h

T.+30 °C ~ 48 h

The times shown in the Workability Times, Waiting Times and Commissioning Times are intended to be approximate and may vary depending on the conditions of the support and the installation environment.

## WARNINGS AND PRECAUTIONS

- Since it is a hygrohardening product, the speed of hardening is strongly influenced by the relative humidity in the environment
- Do not apply on supports with rising damp
- The product is not suitable for permanent immersion in water
- To avoid the formation of unsightly air bubbles, carry out the application with decreasing ambient and substrate temperatures
- Do not apply on surfaces that are not adequately prepared
- Do not apply on dusty, weak, unstable and poorly cohesive supports
- Protect the product from water and atmospheric agents for the first 24 hours after its application
- Respect the consumption and over-application times indicated
- Do not dilute the product with water
- The use of unsuitable thinners different from those indicated can create problems for the product both of an aesthetic nature (color change, sedimentation of the product, variation in the degree of brightness, formation of surface hazes, etc.) and in terms of technical performance. The use of the wrong thinners can also create problems during the application phase. AZICHEM srl therefore does not guarantee any product performance if its dilution is carried out with unsuitable products or products other than those indicated.

The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge. Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

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